

Aim: Surgical site infections (SSIs) remain a common and costly cause of postoperative morbidity and mortality. We aimed to report all SSI outcomes at our centre to identify multivariable predictive factors.

Methods: A prospective study of all general surgical operations at Barnet Hospital was undertaken over a consecutive 8-month period using a standardised SSI proforma. The following factors were also recorded: patient demographics; admission-related (reason, duration); procedural (type, wound classification, closure method, complications, equipment) and other interventions (drains, dressings, antimicrobials).

Results: Data from 158 operative cases (laparoscopic and open) were recorded with 17 SSIs (10.8%). Multivariate analysis revealed closure with surgical staples was independently associated with significantly increased SSI risk (OR 8.78 $p < 0.05$) compared to sutures. No other predictive factors were significant.

Conclusions: There is currently a controversy in the literature as to the relative infection impact of surgical staples versus sutures for wound closure. Most previous studies identify the relative protective role of surgical staples on SSIs. Our study in a general surgical cohort revealed a significant benefit of sutures over staples. These findings warrant further research to identify the mechanistic factors leading to wound infections from different closure techniques to decrease the morbidity and mortality associated with SSIs.

1129: THE USE OF PORCINE COLLAGEN MESH TO PREVENT PERINEAL HERNIATION AFTER EXTRALEVATOR LAPAROSCOPIC ABDOMINOPERINEAL RESECTION OF THE RECTUM (ELAPR). A CASE SERIES

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Background: Postoperative perineal hernias have been reported as a rare complication after conventional Abdominoperineal resection. Female gender, pelvic irradiation, hysterectomy, small bowel length and perineal infection have been associated with this. The combination of fewer adhesions after laparoscopic surgery and a more radical extralevator/cylindrical approach results in a large perineal defect which potentially could predispose to a perineal hernia.

Aim: To evaluate the use of a porcine collagen mesh as an adjuvant to primary closure in preventing perineal herniation post eLAPR.

Material and Methods: Thirty patients undergoing an eLAPR between January 2005–November 2012 were identified. Seven patients who did not have mesh reconstruction were excluded.

Results: Twenty three patients were included. The median age was 72 (42–87). Sixteen (69.5%) patients had preoperative radiotherapy. Median CME resection margin was 10.5 (2–35mm) and hospital stay was 11.5 (5–68) days. Perineal complications* were seen in 10 (43.5%); 4 had superficial wound breakdown with consequent delayed healing and a persistent perineal discharge was seen in a 6 (26 %) patients. Perineal hernia occurrence rate was 1 (4.3%).

Conclusions: We saw no increase in post operative perineal hernia* after the more radical eLAPR following the use of Permacol as primary repair. We advocate that the use of a mesh for primary repair of a perineal defect is appropriate.

1131: REDUCING PERFORATION RATES AND LOCAL RECURRENCE IN APER'S IN A DGH SETTING

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Aim: Abdomino perineal excision of the rectum is required for the surgical treatment of low rectal cancers. LOREC was established to improve operative techniques, oncological outcomes and reduce post operative complications. Within the Mid-Yorks trust LOREC methods were adopted in 2011 with only certain consultants performing APER's. We reviewed perforation rates and local recurrence in cases performed before and after these changes.

Method: A retrospective case note review was performed using electronic databases and case notes for all APER's performed since 2009. Data was extracted for demographics, histology, perforation rates and evidence of local recurrence.

Results: Sixty Seven APER's were performed within the trust since 2009, 28 (42%) since 2011. Five cases (17%) pre 2011 histologically confirmed perforation and no cases (0%) were perforated following 2011. Two cases

pre 2011 had local recurrence detected, both having local perforation at surgery. No local recurrence has been detected in the post 2011 cohort.

Conclusion: Perforation rates at APER and local recurrence were reduced in patients undergoing surgery for low rectal cancers following departmental restructuring although follow up remains short term.

1172: ANAL DYSPLASIA AND ITS PROGRESSION TO SQUAMOUS CELL CARCINOMA OF THE ANUS

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The natural history of anal intraepithelial neoplasia (AIN) is poorly understood and there is no consensus on its management. We aimed to identify the risk of progression to squamous cell carcinoma (SCC) and the factors which increased this risk.

Methods: A retrospective analysis of all patients with biopsy-proven anal dysplasia between 1994–2011 in Glasgow was carried out. Changes suspicious of AIN3 (severe dysplasia) are biopsied with excision of localised AIN3. More extensive changes are mapped and the majority of patients with extensive severe dysplastic change have this excised with reconstruction.

Results: 128 patients were included (29M:99F). 21 Patients presented with SCC (3M:18F). 6 Patients progressed to SCC over follow up, 2 were HIV positive, and 2 were taking immunosuppressant medication. 21% of all patients had an eventual diagnosis of SCC. This proportion was greater in HIV positive (N=4/16, 25%) and immunosuppressed (N=4/13, 31%) patients. 17 patients died (age range 34–85). One patient had anal SCC and three had vulval SCC as a primary cause of death. There was a significant association between immunosuppression and death ($p=0.000$) and borderline association with progression to anal SCC ($p=0.051$).

Conclusions: These findings demonstrate immunosuppressed and HIV positive patients with anal dysplasia warrant close surveillance.

1179: HAS THE CHANGE IN TRUST ANTIBIOTIC POLICY LED TO AN INCREASE IN COLORECTAL SURGICAL SITE INFECTIONS?

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Aim: To measure the impact of changes in hospital antibiotic policy on surgical site infections (SSI) in elective colorectal surgery.

Method: In July 2012, antibiotic prophylaxis at our hospital switched from cefuroxime and metronidazole to amoxicillin, metronidazole and gentamicin, aiming to reduce the incidence of C.difficile. The incidence of SSI was compared during two 6 month periods immediately before (A) and after (B) this change.

Results: 183 consecutive patients (85 males, 98 females) were analysed. The incidence of SSI was 3/82 (period A) and 18/101 (period B), ($p=0.0024$). 3/3 SSI in period A (2 pseudomonas) involved stoma formation or closure, versus 7/18 in period B during which the commonest organisms were Staph.aureus (6/18), pseudomonas (2/18) and E.coli (1/18). The median length of stay (LOS) for a laparoscopic right hemicolectomy was 7 days and anterior resection with loop ileostomy was 10 days. SSI led to increased median LOS, 10 days and 15.5 days respectively. 2 patients were readmitted with SSI during period B.

Conclusion: With surgical practice remaining constant, the change in prophylactic antibiotics for elective colorectal surgery may have led to the increase in post-operative wound infections and subsequent increased LOS, costly to the patients' recovery and hospital resources.

1186: ELECTIVE OPERATING OUT OF HOURS – IS IT SAFE?

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Aim: To determine the incidence of morbidity & mortality in elective colorectal procedures which are undertaken outside of normal working hours.